

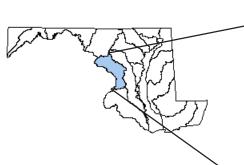
Potomac-Washington Metro Basin

Oced

US-1

Rockville

Current Status of Wadeable Streams



Where is the Potomac-Washington Metro Basin?

The Potomac-Washington Metro basin lies within portions of Prince George's, Montgomery, Frederick, and Charles counties, Maryland. The Potomac River, Anacostia River, Piscataway, Oxon, Rock, Seneca, and Cabin John Creeks are all part of the network of streams that make up the basin.



Little Paint Branch in Montgomery County.

Percent Stream Miles Per FIBI Category



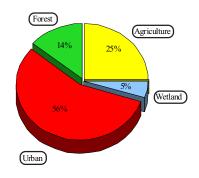
The Fish Index of Biotic Integrity or FIBI is a measurement of stream quality based on fish communities.

What Lives in Our Streams?*

| Estimated Fish Abundance: | 4.9 million |
|---------------------------------------|-------------|
| Number of Fish Species: | 54 |
| Number of Gamefish Species: | 5 |
| Number of Reptile and Amphibian Speci | es: 19 |
| Number of Freshwater Mussel Species: | 1 |

^{*}Based on Maryland Biological Stream Survey collections in wadeable streams basin-wide in 1997.

Land Use in the Basin



The basin covers an area of 636 square miles with a population density of 1,522 people per square mile. The Potomac-Washington Metro area is one of the most densely populated areas in the state.



Water Quality



Oxygen - All of the streams had oxygen levels above the state water quality standard 5 mg/L.



Nitrate - 81% of the streams had nitrate levels (>1 mg/L) that may affect aquatic life. The main sources of nitrates in small streams are fertilizers and acid rain.



Buffering Capacity - 96% of the streams are well buffered against acid rain.



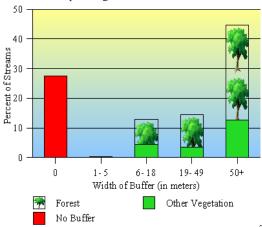
Good



Poor

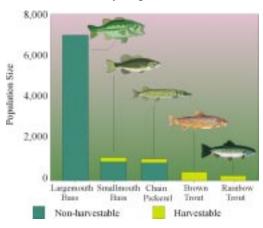
Riparian Zone

Trees, shrubs, and grasses that border a stream are called the stream's *riparian buffer*. This buffer zone can protect a stream against runoff, provides shade, stabilizes stream banks, and supplies food and shelter for aquatic life. A wide and intact buffer offers more protection than a narrow one. The riparian buffers in the Potomac-Washington Metro basin are in fair condition. We can help maintain these buffers by protecting streamside forests and planting trees in disturbed areas.



Gamefish

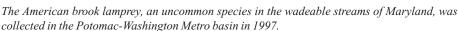
Five gamefish species were found in the basin. Although all of the trout were of a harvestable size, most of the individuals of the other gamefish species were not. It appears that wadeable tributary streams in the Potomac-Washington Metro basin serve as a nursery for gamefish.



Did You Know???



- •Although Captain John Smith first sailed up the Potomac in 1608, it was Captain John Spelman that first traded in the area in 1609.
- The Piscataway Indians initially inhabited the area, with occasional incursions by Seneca and Susquehannock Indians from the north. They eventually left the state after being restricted to a reservation by European settlers in the latter part of the 17th century.



Community Involvement

Want to help? These community groups can show you how!

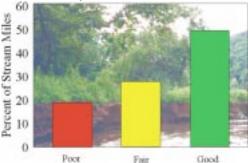
Alliance for the Chesapeake Bay 6600 York Road, Suite 100 Baltimore, MD 21212 Kathleen Millan (410) 377-6270

Anacostia Watershed Society 5110 Roanoke Place #101 College Park, MD 20740 Robert Boone (301) 513-0316 Potomac River Association 1185 Clarks Mill Road Hollywood, MD 20636 Jack Witten (301) 373-5445



Stream Bank Stability

Eroded, unstable banks reduce habitat quality in streams and contribute to water quality problems in downstream areas. On average the bank stability in the basin is good. However, since the streams in the basin flow into the Chesapeake Bay, this bank instability that does exist causes an increase in downstream transport of nutrients and suspended sediments to the Bay.



Stream Bank Condition

Recreation

Seneca Creek State Park, Rock Creek Stream Valley Park, Paint Branch Stream Valley Park, and Watkins Regional Park provide recreational opportunities in the basin. Popular activities include boating, swimming, hiking, camping, biking, fishing, and nature observation.



This family is enjoying the scenery as they paddle around Seneca Creek.

For more detailed information on streams in the Potomac-Washington Metrobasin and elsewhere in Maryland, contact Ann Smith of DNR/MANTA at (410) 260-8610 or email asmith@dnr.state.md.us, or check out the DNR web site at ww.dnr.state.md.us/Bays/waterqual/mbss/mbss.html.